REMARKS

Claims 1-18 remain in this application, and claims 1-18 have been rejected. Claims 1, 5-7, 9, 13, 14, and 18 have been amended. Claims 1, 9, and 14 are the only independent claims.

Claims 1-4, 6, 9-12, and 14-17 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,038,516 ("Alexander") in view of U.S. Patent Number 6,374,145 B1 ("Lignoul") and U.S. Patent Number 4,433,328 ("Saphir"). Claims 5, 7-8, 13, and 18 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander in view of Lignoul and Saphir, and further in view of U.S. Patent Number 6,560,711 B1 ("Given").

Claims 1, 9, and 14 are each limited, as amended, to a "motion sensor" for "powering on" a display to detect a person's presence within "a user-adjustable distance," wherein the motion sensor includes "a fresnel lens for focalizing infrared waves projected from a person's body." The Examiner acknowledged that Alexander "does not teach a motion sensor," that Alexander and Lignoul do not teach "the step of powering on the display," and that Alexander, Lignoul, and Saphir do not teach "a fresnel lens." Nevertheless, the Examiner has alleged that Lignoul "teaches a proximity sensor," that Saphir teaches "the step of powering on the display device," and that Given teaches a "fresnel lens." The modification of Alexander in view of Lignoul, Saphir, and Given is improper because it does not comply with fundamental principles of patent law.

To establish a *prima facie* case of obviousness "the prior art reference (or references when combined) must teach or suggest all the claim limitations" and "there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference

teachings." Manual of Patent Examining Procedure ("MPEP"), Eighth Edition Incorporating Revision No. 1, § 2143, pp. 2100-124 – 2100-125 (emphasis added). Further, the mere fact that the references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990).

None Of The References, Including Lignoul, Discloses A "User-Adjustable" Distance

Claims 1, 9, and 14 are each limited, as amended, to a motion sensor for detecting a person's presence within a "user-adjustable distance." Claim 6, as amended, is limited to "manually adjusting the distance of said remote metering display after [an] installing step." None of the cited references discloses these limitations. From all the cited references, Lignoul is allegedly the closest reference. However, although Lignoul discloses a proximity sensor that detects the presence of a user "in the vicinity," Lignoul does not disclose a motion sensor for detecting a person's presence within "a user-adjustable distance" or for "manually adjusting the distance" of a display after the display has been installed at a point of use. Regarding Lignoul, the Examiner has alleged that

> Lignoul's proximity sensor detects the presence of an user "in the vicinity" [and that it] is noted that any sensor that is designed to detect movement within a certain proximity must necessarily be adjusted for a certain (predetermined) distance for detection either at the manufacturing plant or by the user in order to monitor a specific sphere of coverage.

However, the Examiner has not provided the findings required to substantiate the basis for such reasoning, in the absence of a reference, as required by the MPEP § 2144.03 (B):

> If such notice is taken, the basis for such reasoning must be set forth explicitly. The examiner must provide specific factual findings predicated on sound technical and scientific reasoning to support his or her conclusion of common knowledge.

In particular, the Examiner has not provided support for alleging that the Lignoul proximity sensor can detect a person's presence within a distance that can be adjusted, and that the proximity sensor can detect a person's presence within a distance that can be adjusted by a user.

There is absolutely no teaching or suggestion in Lignoul that the proximity sensor can adjust the distance for detecting the presence of a person. To adjust the distance of the motion sensor, it is implied that the sensor should have at least two settings. However, Lignoul's detection of a user "in the vicinity" of the sensor implies, at most, that the sensor detection has a single setting. Thus, Lignoul certainly does not teach or suggest a motion sensor for detecting a person's presence within an "adjustable" distance. None of the other references cited by the Examiner, *e.g.*, Alexander, Saphir, or Given, comes even remotely close to teaching or suggesting a motion sensor having an "adjustable" distance.

Furthermore, there is absolutely no teaching or suggestion in Lignoul that the proximity sensor can detect a person's presence within a distance that is set by a user. Lignoul simply does not teach who can set the proximity sensor to detect a person that is in "in the vicinity." It is definitely not obvious that a user can set the proximity sensor to detect a person that is "in the vicinity." For example, the proximity sensor can have been set during manufacturing, *e.g.*, in a factory, but not after the sensor has been installed at the point of use. Thus, Lignoul does not teach or suggest a motion sensor for detecting a person's presence within a distance that has been set by a "user." Similarly, none of the other references cited by the Examiner comes even remotely close to teaching or suggesting a motion sensor that can be set by a "user."

Therefore, even if all the references were combined, the resulting combination would still not contain the claimed combination. Applicants respectfully submit that the independent claims

1, 9, and 14, as well as all claims dependent thereon (including claim 6), are not obvious over any of the cited references, including Lignoul, at least for the above-stated applicable reasons, and should be in condition for allowance.

None Of The References, including Given, Discloses A Fresnel Lens

Claims 1, 9, and 14 are each limited, as amended, to a motion sensor having a "fresnel lens." Without citing to any specific part of the specification, the Examiner has alleged that Given discloses a "fresnel lens."

Given does not disclose a fresnel lens. Because the Examiner does not provide any support for the allegation, Applicants have turned to the disclosure of Given. Although Given refers to one component of a motion sensor -- a "pyro-electric infra-red sensor" (column 7, line 21) -- Given never mentions a "fresnel lens." The reference to a "pyro-electric infra-red sensor," which is a distinct sensor component, does not teach or suggest the presence of a "fresnel lens," which is another distinct sensor component. Thus, after careful review, Applicants respectfully submit that Given does not teach or suggest anywhere the use of a fresnel lens. Furthermore, none of the other references comes even close to disclosing a "fresnel lens."

Therefore, even if all the references were combined, the resulting combination would still not contain a motion sensor having a "fresnel lens." Applicants respectfully submit that the independent claims 1, 9, and 14, as well as all claims dependent thereon, are not obvious over Alexander in view of Lignoul and Saphir and further in view of Given at least for the above-stated applicable reasons, and should be in condition for allowance.

None Of The References, including Given, Discloses An Analog-To-Digital Converter

Claim 8 is limited to an "analog-to-digital converter" for receiving and digitizing the analog output signal. Although the Examiner acknowledges that "Given does not specifically disclose an analog-to-digital converter for receiving and digitizing the analog output signal," the Examiner alleges that "such a component would have been obvious to an artisan to be inclusive with Given's method so that the output signal could be digitized as required."

The Examiner's allegation appears to be an Official Notice taken by the Examiner. However, as stated above, such Notice must be set forth explicitly. The Examiner has not provided specific factual findings to support the alleged conclusion of common knowledge.

The including of an analog-to-digital converter is purely based on the intent and requirements of the end application. In fact, in most cases there would not be an analog-to-digital converter. For example, the output from a pyroelectric detector would be run into an analog comparator circuit, rather than an analog-to-digital converter, and then the output signal of the analog comparator would be used to indicate infrared detection at the pyroelectric detector. Thus, Applicants submit that it would not be obvious to include an analog-to-digital converter. Further, none of the other cited references ever mention an "analog-to-digital converter."

Therefore, even if all the references were combined, the resulting combination would still not contain a motion sensor having an "analog-to-digital converter." For the above-stated applicable reasons, Applicants respectfully submit that claim 8 is not obvious over Alexander in view of Lignoul and Saphir and further in view of Given.

There Is No Suggestion Or Motivation To Combine Alexander And Lignoul

There is no suggestion or motivation to modify the method of Alexander, for displaying parameters of a load connected to an AC load control device, in view of the apparatus of Lignoul,

for a proximity sensor for a screen saver and password delay. Lignoul teaches how to activate or deactivate a program in response to receiving input from a proximity sensor. The entire description, from the "Field of the Invention" section through the Claims section, refers only to activating or deactivating a computer program in response to a person being in the vicinity of a computer. For example, in the "Field of the Invention" section, Lignoul teaches that

> the invention relates to a proximity sensor based control system used to prevent a computer program such as a screen saver and/or a password protection program from being activated while an operator remains present in the vicinity of a computer.

Column 1, ll. 7-12. In the "Description of the Related Art" section, Lignoul refers to "screen savers" used in the "art of computer systems" such as "desktop computers," "laptop computers," and "personal digital assistants." Column 1, ll. 14-18. Nowhere does Lignoul mention anything suggesting or motivating one of skill in the art to use the system disclosed in Lignoul with the system disclosed in Alexander. While Lignoul is directed to using a proximity sensor in connection with activating software in a computer system, Alexander is directed to the displaying of current load parameters. The Examiner merely alleges that it "would have been obvious to an artisan at the time of the invention to combine Lignoul's teaching with Alexander's method." The Examiner does not provide support to explain why one of the art would be motivated to combine Alexander and Lignoul. Further, even if it is assumed that Lignoul and Alexander can be combined, that does not render the resultant combination obvious because neither reference suggests the combination. *In re Mills*, 916 F.2d 680.

Therefore, Applicants respectfully submit that the independent claims 1, 9, and 14, as well as all claims dependent thereon, are not obvious over Alexander in view of Lignoul at least for the above-stated applicable reasons, and should be in condition for allowance.

There Is No Suggestion Or Motivation To Combine Saphir With Alexander Or Lignoul

Saphir teaches a system for controlling the application of electrical power to a utilization device, such as lighting fixtures, alarm detectors, etc. Saphir does not provide a suggestion or motivation, and the Examiner does not provide any basis, for combining Saphir's system (for controlling the application of electrical power) with Alexander's method (for displaying parameters of a load connected to an AC load control device) or with Lignoul's proximity sensor (for a screen saver and password delay).

Saphir emphasizes that the "invention may be employed as an energy controller for a wide variety of utilization devices such as office equipment, power equipment, heating and ventilating equipment, water, gas and other utilities." Column 9, lines 20-24. The utility equipment referred to in Saphir, such as fluorescent lights and alarm detectors (column 5, line 67), is far different than the screen saver and password delay systems taught by Lignoul and the parameter displaying method taught by Alexander. For example, Saphir does not even mention the use or application of the disclosed system to any kind of computer systems. Thus, Saphir at most teaches the use of a motion sensor for turning on or off utility equipment (*e.g.*, office equipment, power equipment, water equipment, and gas equipment). Further, even if it is assumed that Saphir can be combined with Lignoul and Alexander, that does not render the resultant combination because neither reference suggests the combination. *In re Mills*, 916 F.2d 680.

Accordingly, Applicants respectfully submit that claims 1, 9, and 14, as well as all claims dependent thereon, are not obvious in view of Saphir, as combined with either Alexander or Lignoul, for the above-described applicable reasons.

U.S. Patent Number 6,696,166 ("Long") Is Nonanalogous Art

To rely on a reference under § 103, the reference must be analogous prior art. MPEP, § 2141.01(a), p. 2100-117. "In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446.

Claims 2, 10, and 15 are each limited to a "vacuum florescent display screen." The Examiner acknowledged that Alexander, Lignoul, and Saphir do not indicate the display screen to be a vacuum florescent display screen, but, nevertheless, alleged "that the use of such a type of screen is well known in the art." After Applicants pointed out that, according to the MPEP, the Examiner must provide specific factual findings to support the alleged reasoning, the Examiner alleged that Long provides an example of a typical display device that includes the use of a florescent display screen.

Long is not in the field of Applicants' endeavor and it is not reasonably pertinent to the particular problem with which the inventors were concerned because it is directed to a "vending machine inventory system and method." The Federal Circuit has indicated that a reference is not analogous simply because the reference has an element in common with the claimed invention. For example, the Federal Circuit has found that a reference related to single in-line memory modules ("SIMMs") for an industrial controller was nonanalogous art to a patent application related to SIMMs for installation on a printed circuit motherboard for use in personal computers. *Wang Labs., Inc. v. Toshiba Corp.*, 993 F.2d 858 (Fed. Cir. 1993). Even though the reference and the claims at issue were both related to memories, the reference was found to be

nonanalogous because the reference was directed to modules of varying sizes, wherein the claimed invention was directed to compact modular memories. Further, the claims at issue were directed to memory modules for use in personal computers and used dynamic random-access-memories, while the reference was directed to memory modules for use in large industrial machine controllers and only taught the use of static random-access-memories or read-only-memories.

Similarly, in our case the only thing that Long appears to have in common with the claimed invention is that it discloses "Vacuum Fluorescent Displays" in a long string of possible displays for the disclosed vending machine:

> The output device 106 may comprise a text or graphic output display that may be of any technology or type known in the art, illustratively including any of a variety of liquid crystal displays (LCD), both Passive Matrix (PMLCD) and Active Matrix (AMLCD)--including Thin-Film Transistor (TFT-LCD), Diode Matrix, Metal-Insulator Metal (MIM), Active-Addressed LCD, Plasma-Addressed Liquid Crystal (PALC), or Ferroelectric Liquid Crystal Display (FLCD). Alternatively, the display may comprise Plasma Display Panel (PDP), Electroluminescent Display (EL), Field Emission Display (FED), Vacuum Fluorescent Displays (VFD), Digital Micromirror Devices (DMD), Light Emitting Diodes (LED), Electrochromic Display, Light Emitting Polymers, video display (cathode ray tube or projection), holographic projection, etc.

Column 3, line 55 – Column 4, line 3 (emphasis added). Thus, Applicants respectfully submit that Long is nonanalogous art.

Accordingly, Applicants respectfully submit that claims 2, 10, and 15 are not obvious in view of Long for the above-described applicable reasons.

There Is No Suggestion Or Motivation To Combine Long With The Other References

Even if it is assumed that Long is analogous art, which is not, there is no motivation or suggestion for combining Long with any of the other references. The references do not suggest

or teach, and the Examiner does not allege, that the vending machine of Long can be combined with the method of Alexander, for displaying parameters of a load connected to an AC load control device, the apparatus of Lignoul, for a proximity sensor for a screen saver and password delay, or the system of Saphir, for controlling the application of electrical power to a utilization device.

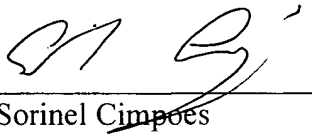
For the above-stated applicable reasons, Applicants respectfully submit that claims 2, 10, and 15 are not obvious over Alexander in view of Lignoul and Saphir and further in view of Long.

Conclusion

Reconsideration of this application in light of the foregoing remarks is respectfully requested. It is believed that no fee is presently due; however, should any additional fees be required (except for payment of the issue fee), the Commissioner is authorized to deduct the fees from Jenkens & Gilchrist, P.C. Deposit Account No. 10-0447, Order No. 47181-00232.

Respectfully submitted,

Date: June 4, 2004

By 

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